

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : EBARA CORP

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(54) HOLLOW YARN MEMBRANE FILTER

(57)Abstract:

PURPOSE: To effectively perform air scrubbing with a small quantity of air, by stretching a network which allows liquid to pass through it but does not allow bubbles of air to pass through, over a distributing plate excepting such part thereof located just and nearly under a hollow yarn membrane module, causing air bubbles of air scrubbing to be passed intensively only from just and nearly under said module.

CONSTITUTION: A network such as a wire gauze 10, etc., having such meshes that allow liquid to pass through them but do not allow bubbles of air to pass through because of the action of surface tension is stretched over the upper surface of a distributing plate 6 located under hollow yarn membrane modules 5 disposed in a filter chamber 3. In this case, a part of the wire gauze 10 just and nearly under each module 5 is cut off so that bubbles of air are allowed to pass only through the cut off part. After continuous filtration of liquid to be treated fed through a feed pipe 7 for a predetermined period of time, back washing is carried out. Air scrubbing is conducted by blowing off air bubbles into water from an air blow-off pipe 9. The air bubbles pass only through the cut off part of the wire gauze, causing the hollow yarn membranes to vibrate, so that attached matters on the surfaces of the membranes are effectively separated.

